

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|------------------------------------------------------------------------------------------|-------------|----------------------|------------------------|------------------|--|
| 10/000,219 | 12/04/2001 | Masafumi Nishitani | Q67539 9175 | | |
| 7590 10/04/2005 SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. | | | EXAMINER | | |
| | | | DUONG, THANH P | | |
| | | | ART UNIT | PAPER NUMBER | |
| Washington, D | | • | 1764 | | |
| | • | | DATE MAILED: 10/04/200 | 5 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | / <i>V</i> | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------|--|--|--|
| Office Action Summary | | 10/000,219 | NISHITANI ET AL. | C | | | |
| | | Examiner | Art Unit | | | | |
| | 1 | Tom P. Duong | 1764 | | | | |
| | The MAILING DATE of this communication app | , – | 1 | | | | |
| Period fo | • • | • | | | | | |
| WHIC - Exte after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANS IN IT IS LONGER, FROM THE MAILING DANS IN IT IS LONGER, FROM THE MAILING DANS IN IT IS LONGER IN IT IN IT IS LONGER IN IT IS LONGER IN IT IN IT IN IT IS LONGER IN IT IN IT IN IT IS LONGER IN IT | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication D (35 U.S.C. § 133) | | | | |
| Status | | | | | | | |
| 1)[🖂 | Responsive to communication(s) filed on 22 Ju | dv 2005 | • | | | | |
| | This action is FINAL . 2b) ☐ This action is non-final. | | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| ,— | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Dispositi | ion of Claims | | | | | | |
| 4)⊠ | 4)⊠ Claim(s) <u>1,3-7,9-12 and 15-36</u> is/are pending in the application. | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| | 5) Claim(s) is/are allowed. | | | | | | |
| |)⊠ Claim(s) <u>1,3-7,9-12 and 15-36</u> is/are rejected. | | | | | | |
| 7)[| - | | | | | | |
| 8)[| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Applicati | ion Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority u | under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. | | | | | | | |
| | 3. Copies of the certified copies of the priori application from the International Bureau | ity documents have been receive | | | | | |
| * S | See the attached detailed Office action for a list of | * ** | d. | | | | |
| | | | | | | | |
| Attachmen | t(e) | | | | | | |
| | e of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date | | | | | | | |
| | mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date | 5) | atent Application (PTO-152) | | | | |
| S Datent and Tr | | -, <u> </u> | | | | | |

Art Unit: 1764

DETAILED ACTION

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1, 4, 5-7, 10-12, 17-26, and 33-36 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chen (6,368,233). Chen discloses a wood-type golf club head having a hollow head body comprising: a shaft (not shown but inherent feature of a golf club); and a striking face 62 including a plurality of metal pieces (main piece 62 of titanium and arcuate piece 64 of stainless steel); a crown member 30 including a plurality of pieces (main piece 32 titanium and annular piece 34 stainless steel. With respect to the methods of forging, rolling, plastic forming, post-machining, press forming, and laser welding of the face member, such manufacturing methods are well-known in the golf club art. Alternatively, the recitation of such process limitation does not further add structural limitation to the claimed invention. Note, the patentability of a product does not depend on its method of

Art Unit: 1764

production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a different process. See *In re Whorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) and *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324 (CCPA 1974). See MPEP 2113.

Page 3

- 2. Claims 27-29 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Peterson (6,339,869). Peterson discloses a wood-type golf club head having a hollow head body (Fig. 1) comprising: a shaft (19); a side wall member including a plurality of pieces (side wall 30 and cap 36). With respect to the methods of forging, rolling, and laser welding of the side wall member, such manufacturing methods are well-known in the golf club art. Alternatively, the recitation of such process limitation does not further add structural limitation to the claimed invention. Note, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a different process. See *In re Whorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) and *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324 (CCPA 1974). See MPEP 2113.
- 3. Claims 1, 3-7, 9-12, and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minabe (5,961,394) in view of Shaw et al. (5,423,535). Regarding claims 1, 7, and 15-23, Minabe discloses a wood-type, golf club head (Fig. 1) comprising: a face member 12, a shaft 26 attached to metal head 12 wherein the metal

Art Unit: 1764

head (Figure 1) comprises a body 12 having an opening in which a striking face member 12 is disposed. Minabe fails to disclose the striking face member including a plurality of metal pieces. Shaw teaches a metal face plate (Col. 2, lines 13-20) can be made of one or more component(s) (Col. 1, lines 42-58 and Figs. 23-26), which are welded together (Col. 4, lines 23-29). Such multi-piece face component(s) provide a golf club with different properties such as weight distribution, friction, spin rates, flexural modulus, resilience, and hardness, and aesthetic appearance (Col. 2, lines 13-17, Col. 2, lines 39-43), Col. 3, lines 35-45). Thus, it would have been obvious in view of Shaw to one having ordinary skill in the art to modify the striking face member of Minabe with a face member with a plurality of pieces as taught by Shaw to gain the above beneficial properties. With respect to the methods of forging, rolling, plastic forming, and laser welding of the face member, such manufacturing methods are well-known in the golf club art. Alternatively, the recitation of such process limitation does not further add structural limitation to the claimed invention. Note, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a different process. See In re Whorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) and In re Fessmann, 489 F.2d 742, 744. 180 USPQ 324 (CCPA 1974). See MPEP 2113. Regarding claims 3 and 9, Minabe fails to disclose the metal pieces of the face member have different thicknesses. Shaw teaches the face-piece components may have a thickness variation in vertical and lateral planes and such geometric configuration facilitates proper weight distribution to

Art Unit: 1764

the club head (Col. 2, lines 39-63). Thus, it would have been obvious in view of Shaw to one having ordinary skill in the art to modify the golf club head of Minabe with metal pieces have different thicknesses to provide proper weight distribution to the club head. Regarding claims 4 and 10, the combination of Minabe in view of Shaw discloses the face material component(s) of the claimed invention since Shaw teaches the face component(s) may be selected from a variety of materials in order to obtain certain properties such as weight distribution, hardness, and flexural modulus, and etc. (Col., 2, lines 13-24); thus, it would have a prima facie obvious to one having ordinary skill in the art to select various materials for the face components to obtain certain desirable properties for the club head. Regarding claims 5 and 11, the recitation of melting temperature does not further add structural limitation to the claimed invention, and it appears the combination of the above applied references has a face components with melting temperature of the claimed invention being the fact that the face material of the applied references is the same as the face material of the claimed invention. Regarding claims 6 and 12, Minable discloses various alloy materials (Col. 3, lines 25-38) can be used for the face member and it appears the selection of material for the face components is obvious matter of design choice in view of the absence of unexpected results.

Page 5

4. Claims 30-32 and 34 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Galy (5,971,867). Galy discloses a wood-type golf club head having a hollow head body (Fig. 4) comprising: a shaft (inherent feature of golf club); a sole member including a plurality of pieces (sole

Art Unit: 1764

plate 11 and arc shape portion 33). With respect to the methods of forging, rolling, and laser welding of the sole member pieces together, such manufacturing methods are well-known in the golf club art. Alternatively, the recitation of such process limitation does not further add structural limitation to the claimed invention. Note, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a different process. See *In re Whorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) and *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324 (CCPA 1974). See MPEP 2113.

Response to Arguments

Applicant's arguments filed July 22, 2005 have been fully considered but they are not persuasive. (1) With respect to the argument that Chen fails to disclose a striking face is formed of metal pieces which "are made of forged or rolled material and appear on the striking face member and are fixed together by laser welding", Examiner respectfully disagrees. As mentioned in the art rejection, such recitation does not further impact structural limitation to the claimed invention. The method production such as forging, rolling, stamping, and/or casting technique, and the laser welding technique to the metal pieces are well-known in the art. In addition, the patentability of a product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a

Art Unit: 1764

different process. See In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966, (Fed. Cir. 1985). See In re Whorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) and In re Fessmann, 489 F.2d 742, 744, 180 USPQ 324 (CCPA 1974). See MPEP 2113. (2) With respect to the argument that Peterson fails to disclose the metal pieces are welded, Examiner respectfully disagrees. Peterson clearly discloses the cap 36 can be permanently welded to the club head (Col. 6, lines 23-26). (3) With respect to the argument of that the Shaw's reference is directed to "golf irons" not wood-type of golf clubs, Examiner respectfully disagrees. Shaw discloses the "head structure of golf clubs, particularly golf irons and is directed more particularly to club heads with varying specific gravity "(Col. 1, lines 16-20). Thus, the scope of Shaw's invention is not limited to iron-type but including putter and wood-type club heads. (4) The request for evidence of common knowledge with respect to forging and rolling of metal club parts are described in the cited USPN 6,334,817; 6,099,414, and 5,172,913 and the request for evidence of common knowledge with respect to welding techniques such as laser welding of club parts are described in the cited USPN 6,099,414, and 5,961,394.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 1764

Page 8

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P. Duong whose telephone number is (571) 272-2794. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Duong September 26, 2005

TD (TD)

Glenn Caldarola Supervisory Patent Examiner Technology Center 1700